

APC10 Antibody

Catalog # ASC11121

Product Information

Application WB, IF, E, IHC-P

Primary Accession Q9UM13

Other Accession <u>EAX05052</u>, <u>119625457</u> Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 21252
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

Application Notes APC10 antibody can be used for detection of APC10 by Western blot at 1 - 2

□g/mL. Antibody can also be used for immunohistochemistry starting at 5

□g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID 10393

Other Names Anaphase-promoting complex subunit 10, APC10, Cyclosome subunit 10,

ANAPC10, APC10

Target/Specificity ANAPC10;

Reconstitution & Storage APC10 antibody can be stored at 4°C for three months and -20°C, stable for

up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high

temperatures.

Precautions APC10 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name ANAPC10

Synonyms APC10

Function Component of the anaphase promoting complex/cyclosome (APC/C), a cell

cycle-regulated E3 ubiquitin ligase that controls progression through mitosis and the G1 phase of the cell cycle (PubMed:<u>18485873</u>). The APC/C complex acts by mediating ubiquitination and subsequent degradation of target proteins: it mainly mediates the formation of 'Lys-11'-linked polyubiquitin chains and, to a lower extent, the formation of 'Lys-48'- and 'Lys-63'-linked polyubiquitin chains (PubMed:<u>18485873</u>). The APC/C complex catalyzes

assembly of branched 'Lys-11'-/'Lys-48'-linked branched ubiquitin chains on target proteins (PubMed:29033132).

Background

APC10 Antibody: Cell cycle regulated protein ubiquitination and degradation within subcellular domains is thought to be essential for the normal progression of mitosis. APC10 is a highly conserved component of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated E3 ubiquitin ligase that controls progression through mitosis and the G1 phase of the cell cycle. APC/C is responsible for degrading anaphase inhibitors, mitotic cyclins, and spindle-associated proteins ensuring that events of mitosis take place in proper sequence. The individual APC/C components mRNA and protein levels are expressed at approximately the same levels in most tissues and cell lines, suggesting that they perform their functions as part of a complex. It has been suggested that APC10 plays a role to regulate the binding of specific substrates to the APC/C complex, similar to that of coactivators.

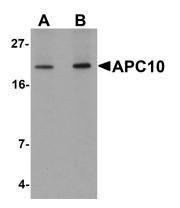
References

JM Peters. The anaphase promoting complex/cyclosome: a machine designed to destroy. Nat. Rev. Mol. Cell Biol.2006; 7:644-56.

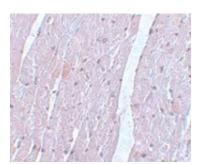
Jorgensen PM, Graslund S, Betz R, et al. Characterisation of the human APC1, the largest subunit of the anaphase-promoting complex. Gene2001; 262:51-9.

Passmore LA, McCormack EA, Au SWN, et al. Doc1 mediates the activity of the anaphase-promoting complex by contributing to substrate recognition. EMBO J.2003; 22:786-96.

Images

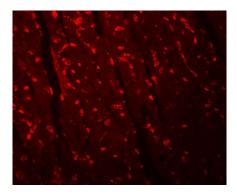


Western blot analysis of APC10 in mouse heart tissue lysate with APC10 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of APC10 in mouse heart tissue with APC10 antibody at 5 μ g/mL.

Immunofluorescence of APC10 in mouse heart tissue with APC10 antibody at 20 $\mu g/mL$.



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